



### Datasheet

# NetApp FAS2500 Series

Delivering best-in-class value and capability

#### **KEY BENEFITS**

### **Delivers Best Value for Your IT Investment**

- Serves a wide range of SAN and NAS workloads with advanced unified architecture.
- Meets more business needs with best-in-class data management.
- Achieves better price/ performance with up to 5x more flash than previous generation.

#### **Simplifies Storage Operations**

- 3x faster to set up and easy to manage with the click of a button.
- Reduces storage growth complexity with nondisruptive operations.

## **Grows with Your Changing Needs**

- Start small and grow big, invest in what you need, add without disruption as you go.
- Ready to connect to the cloud and easily move data in and out.

### The Challenge

#### **Explosive data growth**

Organizations of all sizes and local offices of larger companies are challenged more than ever by shrinking budgets, overextended staff, and the ever-changing demands caused by data growth and, most recently, cloud adoption. These challenges, coupled with the increasing complexity of your Windows®, VMware®, or server virtualization environment, can quickly eat your budget and affect the productivity of your staff.

#### **The Solution**

### Hybrid storage with best-in-class data management

Designed to support more of your IT needs, longer, NetApp® FAS2500 hybrid storage arrays provide more value for your money than any other systems in their class. FAS2500 simplifies the task of managing growth in house and in the cloud by providing support for a broader range of workloads along with seamless scaling of performance and capacity.

And with proven integration to the cloud, you can leverage external storage resources to protect data and handle dynamic storage needs, For growing

organizations concerned about budgets today and meeting challenging IT needs in the future, the FAS2500 is the perfect choice.

### Delivers the most value for your IT investment

NetApp FAS2500 hybrid storage arrays are built to deliver robust capabilities so that you don't need to buy additional equipment as IT needs change. Every FAS2500 includes unified support for NAS and SAN workloads and can be configured as a hybrid, even all-flash system, to meet specific price/performance goals. In addition, every FAS2500 delivers:

- New: Increased price/performance value. Leverage up to 5x more of the industry's most efficient flash technology, increasing usable capacity by 48% and accelerating workloads by up to 46%, compared to hard disk only systems.
- Best-in-class storage efficiency.
   Deduplication, compression, and thin provisioning guarantee 50% storage savings.
- New: Advanced IT integration options. Supports a broader set of applications and delivers 2x the connectivity than previous generation with the new flexible, on-board unified target adapters (UTA2s).

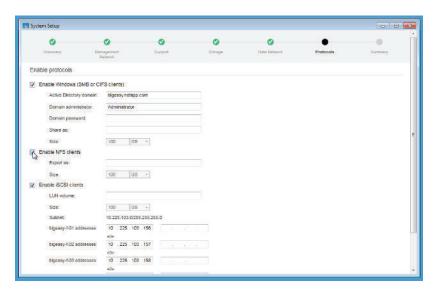


Figure 1) Quick and easy setup of FAS2500 systems using System Setup utility.

 New: Expanded enterprise-class data management. Access NDO, QoS, and superior virtualization integration usually only offered in highest end systems to meet complicated IT needs without buying new storage.

#### Simplifies storage operations

Free up your time, money, and people. You don't need to be a storage expert to deploy and manage NetApp storage systems. The NetApp FAS2500 series offers a powerful range of technologies to help reduce complexity and increase the efficiency of your storage administrators:

- New: Reduce setup time by 3x using System Setup utility than manual installation and eliminate repetitive operations. Updated OnCommand® suite of software tools automates tasks with the click of a button.
- Manage 2 to 3 times more storage.
   Leading integration with key business applications to enable administrators to be drastically more efficient.
- New: Upgrade software and add or retire storage without downtime. Enhanced nondisruptive operation technology dynamically handles more storage tasks without costly interruption to IT.
- Keep operations running at peak efficiency. Easily tune and troubleshoot virtual server environments

- with OnCommand Balance. Quickly resolve issues with proactive service diagnostics.
- Protect your critical data more efficiently with integrated data protection such as RAID-DP®, Snapshot™, and Open Systems SnapVault®.

System Setup is an intuitive GUI-based utility that dramatically simplifies the setup and provisioning of your FAS2500 systems. System Setup automatically discovers your new system and uses a wizard process that provides recommended defaults for optimal system utilization and performance. Now it takes just minutes to set up your FAS2500 systems. OnCommand System Manager is a simple but powerful browser-based management tool to simplify ongoing management and administration of the FAS2500 systems.

In addition to the standard set of powerful software that comes with every FAS2500 system, the optional Extended-Value Software products offer advanced capabilities such as instant data recovery, instant cloning, data replication, disk-to-disk backup, and application-aware backup and recovery.

#### Built to meet your changing needs

As your business grows and priorities change, it is important to have a storage solution that responds to your changing IT needs dynamically and cost-effectively.

The NetApp FAS2500 series provides different ways to support your growing needs:

- Start small and grow big by adding more nodes as needed nondisruptively without tying up large capital expenses upfront.
- Simplify scale-out with a two-node switchless cluster that requires no additional infrastructure investments.
- Upgrade to higher end NetApp systems while using the same operating system and software tools, reducing administrative overhead by up to 60% by eliminating retraining.
- Get built-in investment protection with the ability to convert your FAS2552 and FAS2554 system to an external disk shelf when upgrading to larger NetApp systems.

Cloud has increasingly become an important part of IT strategy as organizations look to be more responsive to their users' needs for quick access to storage and off-site data protection. If your IT strategy includes cloud, now or in the future, a FAS2500 that runs Data ONTAP is a great choice. Your FAS2500 will arrive ready to connect to multiple cloud services and solutions—all built on NetApp Data ONTAP and available through hundreds of NetApp partners worldwide. You'll choose between industry-leading public cloud service providers, such as OBS, Verizon



Figure 2) You don't need to be an expert to configure your storage with the simple, easy-to-use NetApp System Manager Console.

Terremark, AT&T, Rackspace, ACS, and T-Systems, and innovative partners such as Blue River IT that offer cutting edge solutions based on NetApp Private Storage for Amazon Web Services. Built on a universal data platform, equipped with data portability technologies, NetApp-based cloud solutions enable seamless movement of data in and out of the cloud. So you can manage and control your data with confidence and prevent vendor lock-in.

#### **Choosing the Right System**

NetApp offers three systems in the FAS2500 family to help you find the balance of price, performance, capacity, and features that best fits your needs.

#### FAS2554

Equipped for higher capacity needs, the FAS2554 is a great fit for:

- Midsized organizations and distributed sites of larger organizations
- Windows application and virtual server consolidation with multiple workloads
- Customers that require cost-effective larger capacity, I/O flexibility, and investment protection for future growth

#### FAS2552

Equipped for higher performance needs, the FAS2552 is a great fit for:

 Midsized organizations and distributed sites of larger organizations that require smaller form factor and lower power consumption

- Windows application and virtual server consolidation with multiple workloads
- Customers that require higher performance, I/O flexibility, and investment protection for future growth

#### **FAS2520**

Geared toward value-oriented deployments, the FAS2520 is a good fit for:

- Smaller organizations, remote offices, and local storage
- Consolidating virtualized environments with a small number of Windows applications or general file-serving workloads
- Customers that need a powerful system at a competitive price

#### **Global Services**

NetApp and our partners employ the world's foremost experts in storage networking to help you plan your next-generation IT environment or optimize the operational efficiency of your existing infrastructure. Let us help you maximize the business value from your NetApp investment and achieve the highest availability for your enterprise data environment with innovative high-touch, personalized services across your IT lifecycle:

- Strategy services. Align IT with your business goals
- Design services. Architect the optimal storage environment

- Deploy and transition services. Implement validated architectures and prepare your storage environment
- Operations services. Attain continuous operations while driving operational excellence and efficiency

As an industry leader in innovation, NetApp Global Support provides tools and technology to enable business continuity. AutoSupport™, NetApp's suite of automation tools, is delivered as a service to help you proactively manage your systems and quickly resolve issues. AutoSupport functions as a "virtual staff" to protect critical data, save time, and reduce impact on your IT resources.

In addition, NetApp Services provides in-depth knowledge transfer and educational services that give you unprecedented access to our global technical resources and intellectual property. Learn more at www.netapp.com/services.

#### **About NetApp**

NetApp creates innovative storage and data management solutions that deliver outstanding cost efficiency and accelerate business breakthroughs. Discover our passion for helping companies around the world go further, faster at www.netapp.com.

Go further, faster®

#### Specifications per HA Pair

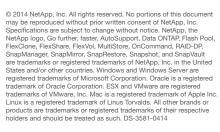
FAS2500 SERIES OVERVIEW	FAS2554	FAS2552	FAS2520
Maximum raw capacity <sup>1</sup>	576	518	336
Maximum drives	144	144	84
Controller form factor	4U/24 drive	2U/24 drive	2U/12 drive
ECC memory	36GB	36GB	36GB
Maximum Flash Pool™	4TB	4TB	4TB
NVMEM/NVRAM	4GB	4GB	4GB
Onboard I/O: UTA 2 (8Gb FC/16Gb	8 <sup>2</sup>	8 <sup>2</sup>	N/A
FC/FCoE/10GbE)			
Onboard I/O:10G Base-T	N/A	N/A	8 <sup>3</sup>
Onboard I/O: GbE	4	4	4
Onboard I/O: 6Gb SAS	4	4	4
OS version	Data ONTAP® 8.2.2 or later		
Shelves and media	See the Shelves and Media page* on NetApp.com for the most current information		
Storage protocols supported	FCP, iSCSI, NFS, CIFS, FCoE	FCP, iSCSI, NFS, CIFS, FCoE	iSCSI, NFS, CIFS
Host/client operating systems supported	Windows 2000, Windows Server® 2003, Windows Server 2008, Windows Server 2012,		
	Windows XP, Linux®, Oracle® Solaris, AIX, HP-UX, Mac® OS, VMware, ESX®		

#### Specifications for Scale-Out Configurations (Hybrid and Disk-Only Configurations)

	FAS2554	FAS2552	FAS2520
NAS/SAN scale-out	1-8 nodes (4 HA pairs)		1-4 nodes (2 HA pairs)
Maximum drives	576	576	168
Maximum raw capacity	2.30PB	2.07PB	672TB
Maximum Flash Pool	16TB	16TB	8TB
Maximum memory	144GB	144GB	72GB
Cluster interconnect	100	BbE	10G Base-T

Included software	Efficiency: FlexVol®, deduplication, compression, and thin provisioning Availability: Multipath I/O, MultiStore® Data protection: RAID-DP, Snapshot, and Open Systems SnapVault Performance: FlexShare®, storage QoS Management: System Setup, OnCommand System Manager, OnCommand Unified Manager Storage protocols: All supported data protocol licenses included	
Extended-Value Software (optional)	OnCommand Balance for NetApp: Advanced analytics for physical and virtual environments A Premium Bundle can be purchased with all FAS2500 systems and includes: • SnapRestore*: Software to restore Snapshot copies in seconds • SnapMirror*: Simple, efficient, and flexible disaster recovery • FlexClone*: Instant virtual copies of databases or virtual machines • SnapManager* suite: Application- and virtual machine-aware backup, recovery, and cloning • SnapVault: Disk-to-disk backup software for complete backups and online archives to primary or secondary storage in minutes instead of hours or days  See NetApp.com for descriptions of these products and information on additional software available from NetApp.	



















All specifications are for dual-controller, active-active configurations.

1. Maximum raw capacity depends on the drive offerings. See the Shelves and Media page\* on NetApp.com for the most current information.

2. FAS2552 and FAS2554 onboard ports can be configured as either 8Gb/16Gb FC port pair or 10GbE port pair and mixed combinations.

FAS2520 onboard ports are 10GBASE-T only.
 http://www.netapp.com/us/products/storage-systems/disk-shelves-and-storage-media/index.aspx.